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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,229	09/29/2003	Takako Fujii	B-5248 621294-8	9863

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EXAMINER	
HILL, LAURA C	

ART UNIT	PAPER NUMBER
3761	

DATE MAILED: 08/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/675,229	FUJII ET AL.	
	Examiner	Art Unit	
	Laura C. Hill	3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7 and 10-16* is/are rejected.

7)☒ Claim(s) *8 and 9* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2/24 & 6/28/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: on page 4, paragraph 3, line 5 of the specification, the term 'intented' should be changed to 'indented'. The same error should be corrected on page 5, paragraph 1, line 4; page 5, paragraph 2, line 4; paragraph 3, line 7 and page 6, line 5.

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Body Fluid Absorbing Article with Multi-Layered Absorbent core having layers of different densities.

3. Claim 1 is objected to because of the following informalities: the 'absorbing article' as recited in claim 1 is referred to 'sanitary napkin 100' on page 11, line 4 of the specification; the 'body fluid impermeable back member' as recited in claim 1 is referred to as 'liquid impermeable back sheet 101' on page 11, line 5 of the specification; and the 'body fluid permeable surface member' as recited in claim 1 is referred to as 'liquid permeable top sheet 102' on page 11 of the specification.

4. Claim 8 is objected to because of the following informalities: the 'two side portions of said lower layer are squeezed out' as recited on lines 3-4 is referred to as the 'squeeze-out portion' on line 8 of the claim.

The list described above is not meant to be exhaustive and it is noted there may be other typographical and/or grammatical errors contained within the specification.

Appropriate correction is required for improved clarity.

Claim Interpretation

5. The 'lower layer sequentially from the side of said body fluid permeable surface member' as recited in claim 1 is interpreted to mean the lower layer 103L has an upper surface adjoining the upper layer 103U and a lower surface contacting back sheet 101.

6. The 'recesses' as recited in claim 2 is given its broadest reasonable interpretation of an indentation or a cut notch formed on the surface of a layer.

7. The 'clearance' as recited in claim 5 is interpreted to mean that the top sheet 102(A) is held in close contact with the upper surface of the second sheet 104(A) without any significant space between the two adjacent layers, thus forming a 'clearance' as specified on page 28 of the specification.

8. The 'at least two side portions of said lower layer are squeezed out from the end portions of said upper layer' as recited in claim 8 is interpreted to mean that the very end-most portions of the lower layer extend laterally outward and beyond the surface of the upper layer.

9. The term 'mutual distance' as recited in claim 11 is interpreted to be the inter-emboss distance x as seen in figure 5a.

10. The 'indented recesses are formed into a continuous net shape' as recited in claim 12 is interpreted to mean that the indentations form a grid-like structure on the surface of the absorbent article.

11. The 'inclination direction' as recited in claims 14-16 are interpreted to mean the direction or axis which runs parallel to the angle where the recesses are indented, or a generally /-shaped direction.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear from the specification and drawings what is meant by the phrase the 'absorbent is not provided, at the portion in said upper layer to contact with said lower layer and at the portion in said lower layer to contact with said upper layer' since the multi-layered absorbent is present throughout and extending over the entire surface of the upper and lower layers.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 1-3, 5-6 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Cole et al. (EP 0613671 A2). Regarding claims 1-3 and 6 Cole et al. discloses an absorbent unitary pad 100 comprising an absorbent core 104 sandwiched between a fluid permeable cover layer 110 and impermeable backing material 102 (page 4, lines 50-52, page 6, lines 10-13, figure 1); characterized in that said absorbent 104 includes two-pieces, an upper/top layer 108 and a lower layer 106 sequentially from the side of permeable surface 110 (page 5, lines 10-14, figures 1 and 4); and in that the lower layer

106 has alternating densities with an array of recesses 120 formed by embossing into its body-facing surface for conducting liquid across the surface of the absorbent article (page 5, lines 15-19, lines 42-45). The lower layer 106 is capable of having a higher density than the upper layer 108 since the lower layer is embossed and therefore compacted and denser. If a prior art structure is capable of performing the intended use as recited in the preamble, then it meets the claim. See, e.g., In re Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997).

Regarding claim 5 Cole et al. discloses an absorbent article 100 as discussed above with respect to claim 1. Cole et al. further discloses the permeable surface 110 in contact with the absorbent 104 do not have a clearance (figure 1).

Regarding claim 12 Cole et al. discloses an absorbent article 100 as discussed above with respect to claim 2. Cole et al. further discloses the recesses are formed into a continuous net shape (figure 2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

14. Claims 4, 10-11 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cole et al. (EP 0613671 A2) as applied to claims 1-2 above, and further in view of Fitzgerald (US 4,435,178). Cole et al. discloses the absorbing article 100 with recesses 120 as discussed above with respect to claim 1. Cole et al. does not expressly disclose the recesses are formed on the garment-facing side of the lower layer. Fitzgerald discloses absorbent sanitary napkin 10 with absorbent core 12 having an upper layer 14 and lower layer 16 having recesses 18 formed on the body-facing side and compressed grooves/recesses 19 formed on the garment-facing side (col. 2, ll. 40-68, figure 1). Fitzgerald further discloses the recesses and compressed portions are desirable to easily received and prevent the gushes of waste fluid from gushing through the pad, and thus enhancing body fluid distribution (col. 2, ll. 11-16). One would be motivated to modify the recesses of Cole et al. with the additional recesses of Fitzgerald since both references disclose body fluid absorbing articles with multiple-layered absorbent cores with recesses for fluid distribution. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to modify the recesses of Cole et al. with the recesses of Fitzgerald, thus providing recesses on the garment-facing side of the lower absorbent layer.

Regarding claims 10-11 Cole et al. discloses upper and lower layers and an array of recesses 120 formed by embossing as discussed above with respect to claim 1. Cole et al. does not expressly disclose density ranges of each layer or a mutual

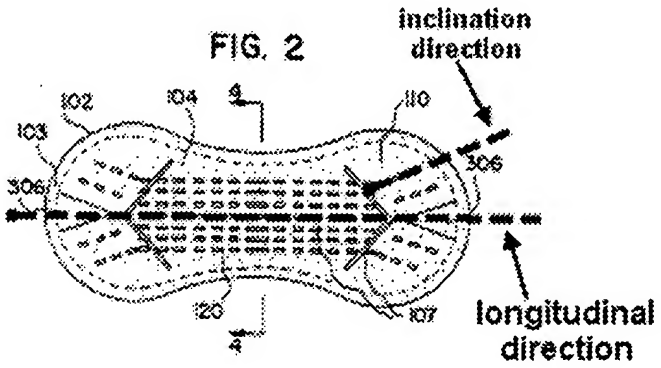
distance range. The densities of each layer is a result-effective variable since the density depends at least in part on the amount of compression imparted on the surface of the layer during embossing. The mutual distance is a result-effective variable since the distance is dependent on the pattern of embossing. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Cole et al. with the densities and mutual distance range claimed, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch and Slaney*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claims 13-14 Cole et al. discloses the absorbing article as discussed above with respect to claim 2. Cole et al. does not expressly disclose an embossing percentage or angle of indentation. The embossing percentage is a result-effective variable since it is a measure of the thickness before and after indentation and the thickness depends on the amount of pressure applied during indentation. The angle of indentation is a result-effective variable since the angle varies based on the indentation pattern desired. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Cole et al. with the embossing percentage and angle of indentation values claimed, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch and Slaney*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claims 15-16 the Cole et al. and Fitzgerald references do not expressly disclose an indentation angle. The indentation angle is a result effective variable since the angle depends on the size of the indentation. It would be obvious to

one of ordinary skill in the art at the time the invention was made to modify Cole/Fitzgerald with the indentation angle claimed, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch and Slaney*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980).

Cole et al. further discloses the linear portions of the article are longer and wider than those of the inclination direction (figure 2).



Allowable Subject Matter

15. Claims 8-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the art of record fails to show two side end 'squeeze-out' portions that are a part of a lower absorbent layer that extend beyond the end of the upper layer to have a *density lower* than the entire lower layer. The art of record also fails to show these 'squeeze-out portions' have a density greater than an upper layer of a multi-layered absorbent core.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Meisel (US 3,431,911) is cited for showing an incontinent pad 10 with a multi-layered absorbent sandwiched between a fluid permeable layer 15 and a permeable top sheet 13 having lines of embossment 23 located on the garment-facing surface of the lower layer 14.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Hill whose telephone number is 571-272-7137. The examiner can normally be reached on Monday through Friday (off every other Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Laura C. Hill
Examiner
Art Unit 3761

LCH

TATYANA ZALUKAEVA
PRIMARY EXAMINER

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